Population expansion of Swee Waxbill Coccopygia melanotis, Red-billed Firefinch Lagonosticta senegala and Karoo Scrub Robin Cercotrichas coryphoeus in Lesotho?

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Expansion de la population de l'Astrild à joues noires Coccopygia melanotis, l'Amarante du Sénégal Lagonosticta senegala et l'Agrobate coryphée Cercotrichas coryphoeus au Lesotho? Des études sur le terrain faites en 1999–2002 montrent que la distribution et l'abondance de l'Astrild à joues noires Coccopygia melanotis, l'Amarante du Sénégal Lagonosticta senegala et l'Agrobate coryphée Cercotrichas coryphoeus au Lesotho diffèrent de ce qui est mentionné dans les ouvrages de référence et qu'il pourrait s'agir d'une expansion de la population de ces trois espèces.

The present status of several bird species in Lesotho appears to differ from that described in major works on the avifauna of the country (Jacot-Guillarmod 1963, Winterbottom 1964, Osborne & Tigar 1990, Bonde 1993) or in major handbooks on southern African birds (Harrison et al. 1997, Hockey et al. 2005). Here, I report the results of a study undertaken in Maseru district, in 1999–2002, on the distribution and abundance of three species: Swee Waxbill Coccopygia melanotis, Red-billed Firefinch Lagonosticta senegala and Karoo Scrub Robin Cercotrichas coryphoeus.

Swee Waxbill is endemic to southern Africa, occurring from Western Cape to KwaZulu-Natal and Limpopo, South Africa, and in Lesotho and Swaziland, with isolated populations elsewhere (Nuttall 2005). Although generally common, it is considered rare over most of the Highveld, while in the Maloti area of Lesotho it is completely absent (Bates 1996, Barnard & Herremans 1997, Nuttall 2005). In the lowlands and foothills of Lesotho it is considered very rare (Bonde 1993, Bates 1996), with just four records during the first Southern African Bird Atlas Project (SABAP) study period (1987-92; Barnard & Herremans 1997). Red-billed Firefinch is fairly common in southern Africa (Nuttall 1997, Mills 2005), but is regarded as very rare in Lesotho, with only two records during the first SABAP (Osborne & Tigar 1990, Bonde 1993, Harrison 1997). Karoo Scrub Robin, another southern African endemic. is common from southern Namibia to Western Cape and southern Free State, but there are just two previous records in Lesotho, in the vicinity of Maseru (Osborne & Tigar 1990, Bonde 1993, Harrison 1997, Oatley 2005).

Study area and Methods

Observations were made during 1999–2002 throughout Lesotho, but were focused on Maseru district. All records were dated and localities identified on a 1:250,000 scale map, prepared by the Department of Land Surveys and Physical Planning, and published by the Lesotho Government in 1994.

Karoo Scrub Robin was counted using line transects (Bibby et al. 1992), in 1999–2001. Transects were conducted in the middle of the bushy vegetation belt on the slopes around plateaux (Kopij 2010, 2013). The number of pairs recorded was extrapolated across the entire vegetation belt to achieve the estimated total number of breeding pairs around a given plateau. Swee Waxbill and Red-billed Firefinch were recorded incidentally and opportunistically, either on transects around plateaux or sandstone cliffs, or elsewhere during other field work (Kopij 2001, 2006, 2010, 2013).

Maseru district covers 4,279 km², approximately 50% of which falls within the lowlands and foothills (below 2,200 m), between the Caledon River in the west and the Makhaleng River in the east. Lowlands and foothills lie entirely within the *Cymbopogon–Themeda* Grassveld, whilst the highlands (above 2,200 m) lie within the *Festuca–Themeda* Mountain Grassveld (Acocks 1987). Most of the lowlands and foothills have been converted to farmland, with indigenous bushy areas preserved on Clarens Formation sandstone cliffs (Fig. 1). The highlands are used mainly as pasture for cattle, sheep and goats in spring and summer (August–March).



Table 2. Population size of Karoo Scrub Robin Cercotrichas coryphoeus in bushy vegetation around plateaux in Lesotho in 1999–2001.

Tableau 2 Population de l'Agrobate d	coryphée Cercotrichas coryphoeus dans	la végétation arbustive autour des	plateaux du Lesotho en 1999-2001
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Plateau	Coordinates	Year	No. of pairs		Source
			recorded	estimated	
Masite	29°36'S 27°27'E	2000	35	30-50	Kopij (2006)
Makhoarane	29°38'S 27°33'E	1999-2001	21	25-30	Kopij (2006)
Qeme	29°28'S 27°26'E	1999-2000	19	20-40	Kopij (2010)
Qoatseneng	29°19'S 27°29'E	2000-2001	6	4-7	Kopij (2010)
Qhomane	29°35'S 27°36'E	2000	6	7–10	Kopij (2013)
Berea	29°17'S 27°38'E	2001	4	10-20	Kopij (2013)
Leribe	28°07'S 29°05'E	2001	0	0	Kopij (2013)
Total			81	96–157	

associated with bushy vegetation at the base of sandstone cliffs around plateaux in Maseru district, including within the city of Maseru (Kopij 2010). All plateaux inhabited by Karoo Scrub Robins are in the lowlands. Remarkably, Karoo Scrub Robin is restricted to this habitat, around plateaux. It was not found in the same vegetation along sandstone cliffs beyond the plateaux, e.g. between Roma and Matsieng or between Makhalanyane and Roma (pers. obs.). In total, 96-157 pairs were recorded, and the population in Maseru district is estimated at 140-180 pairs; population density is estimated at 7-10 pairs / 100 km².

Discussion

The increase of Red-billed Firefinch in Lesotho can be attributed to the introduction of trees and shrubs in farmland, with the recent invasion by Black Wattle along some stream valleys (Ambrose et al. 2000) potentially important in this respect. Red-billed Firefinch was usually recorded alone (50%) or in pairs (25%) (Table 1). Elsewhere in southern Africa, e.g. in the Zambezi Region, it is usually encountered in larger groups (Mills 2005; pers. obs.).

The apparent increase by Swee Waxbill might to some extent be attributed to an increase in observer activity in its habitat, especially in 1999-2002. Being rather elusive and strictly associated with bushy vegetation, it could easily have been overlooked in the past.

This is unlikely to have been the case for Karoo Scrub Robin, as it is quite conspicuous. This species has probably expanded its range from the eastern Free State into the southern Lesotho lowlands in recent years.

Studies conducted in Maseru district in 1999-2002 present a different picture of the distribution and abundance of the three selected species opposed to previous work. The status of several other passerines in Lesotho may merit further investigation, as these might also differ from the literature.

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